

Appl. No. 10/065,684
Reply to Office Action Dated MARCH 6, 200

REMARKS

Applicants request reconsideration of the application in view of the above amendments and the following remarks. Claims 1 to 15 were pending. Claim 3 has been canceled without prejudice and some other claims have been amended from clerical errors. It is believed that no new matter has been added by way of any amendments provided herein.

Drawings

New formal drawings are enclosed.

Claim rejection under 35 USC § 103

The Examiner states that claims 1 to 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cope in view of Ortoleva. The Applicants disagree on this position.

Effectively, Ortoleva discloses a method for simulation-enhanced fracture detection, and page 21, paragraph 345 explains that *FDM [field development and management] also uses a new information theory method for finding the most probable state and associated uncertainty. It incorporates the logic of a history matching algorithm as suggested in FIGS. 46 and 47 except that it achieves great efficiency by directly determining the most probable state (e.g., spatial distribution of permeability, fractures, remaining reserves, etc.) and associated uncertainty. All the aforementioned FDM input data is introduced through an error measure that is used to constrain the probability of the reservoir state.* So Ortoleva compares format synthetic data package (i.e. optimized data) and observed data package (i.e. measured data) so to define the most probable state of data. In summary, FDM can be described as a dichotomy process i.e. an algorithm creating an optimized map reflecting the reservoir state wherein number of iterations

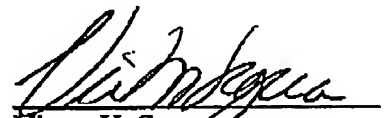
Appl. No. 10/065,684
Reply to Office Action Dated MARCH 6, 200

will affine the probability of the reservoir state (see paragraph 351). Further, never Ortoleva discloses the fact that the format synthetic data package is based on a dynamic model. If the ordinary skill in the art would know the teaching of Cope and Ortoleva: we will know that SDM data can be used to obtain SSD data by interpolating and optimizing SDM data, but without using any dynamic model. The Applicant believe that first claim and following claims involve an inventive step.

Applicants believe this reply to be fully responsive to all outstanding issues. This paper is submitted in response to the Office Action dated March 6, 2006 for which the three months date for response is June 6, 2006. Please apply any charges not covered, or any credits, to Deposit Account 50-2183 (Reference Number US 21.0910).

Schlumberger Technology Corporation
Sugar Land Product Center
200 Gillingham Lane, MD 9
Sugar Land, Texas 77478
(281) 285-4562
(281) 285-8821 Fax
Date 2-June-06

Respectfully submitted,


Victor H. Segura
Reg. No. 44,329
Attorney for Assignee